

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

installing a PXE client certificate of authenticity in the PXE client;

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

sending by the PXE client via the network the installed PXE client certificate of authenticity;

authenticating by the server of the PXE client by the received PXE client certificate of authenticity; sending by the server via the network a server certificate of authenticity to the PXE client in response to authenticating by the server of the PXE client;

authenticating by the PXE client of the server by the received server certificate of authenticity;

requesting by the authenticated PXE client using the PXE code via the network that the authenticated server transfer the boot files to the authenticated PXE client;

transferring the boot files from the authenticated server to the authenticated PXE client in response to the requesting by the authenticated PXE client;

authenticating by the authenticated PXE client of the transferred boot files; and

executing by the authenticated PXE client of the authenticated boot files thereby creating, recreating, modifying, expanding or enhancing an operating system for the PXE client.

Claim 2 (currently amended): The method of claim 1 wherein PXE clients that have an invalid or revoked certificate are not authenticated or answered by the server.

Claim 3 (currently amended): The method of claim 1 wherein servers that have an invalid or revoked certificate are not acknowledged by the PXE client.

Claim 4 (canceled).

Claim 5 (currently amended): The method of claim 1 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 6 (currently amended): A method of transferring boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

 authenticating by the server of the PXE client, the server receiving a request from the PXE client using the PXE code for the transfer of the boot files for execution by the PXE client of at least one of create, recreate, modify, expand and enhance an operating system of the PXE client;

 authenticating by the PXE client of the server; and

 transferring the boot files from the authenticated server to the authenticated PXE client wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 7 (currently amended): The method of claim 6 further comprising authenticating by the authenticated PXE client of the transferred boot files.

Claim 8 (currently amended): The method of claim 7 further comprising executing by the authenticated PXE client of the authenticated boot files.

Claim 9 (currently amended): The method of claim 6 wherein PXE clients that have an invalid or revoked certificate are not authenticated or answered by the server.

Claim 10 (currently amended): The method of claim 6 wherein servers that have an invalid or revoked certificate are not acknowledged by the PXE client.

Claim 11 (currently amended): The method of claim 6 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 12 (currently amended): The method of claim 6 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 13 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:
installing a PXE client certificate of authenticity in the PXE client;
requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;
sending by the PXE client using the PXE code via the network the installed PXE client certificate of authenticity;
authenticating by the server of the PXE client by the received PXE client certificate of authenticity; and
transferring the boot files from the server to the authenticated PXE client, wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 14 (currently amended): The method of claim 13 further comprising:
authenticating by the authenticated PXE client of the transferred boot files;
executing by the authenticated PXE client of the authenticated boot files.

Claim 15 (currently amended): The method of claim 14 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 16 (currently amended): The method of claim 13 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 17 (currently amended): The method of claim 13 wherein PXE clients that have an invalid or revoked certificate are not authenticated or answered by the server.

Claim 18 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

installing a PXE client certificate of authenticity in the PXE client;

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the to the PXE client;

sending by the PXE client using the PXE code via the network the installed PXE client certificate of authenticity; and

receiving by the PXE client of the boot files from the server wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 19 (currently amended): The method of claim 18 further comprising:

authenticating by the authenticated PXE client of the transferred boot files;

executing by the authenticated PXE client of the authenticated boot files.

Claim 20 (currently amended): The method of claim 19 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 21 (currently amended): The method of claim 18 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 22 (currently amended): The method of claim 18 wherein PXE clients that have an invalid or revoked certificate are not authenticated or answered by the server.

Claim 23 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment, comprising:

receiving by the server a request from the PXE client using the PXE code via the network that the server transfer the boot files to the PXE client;

receiving by the server using the PXE code via the network a previously installed PXE client certificate of authenticity from the PXE client;

authenticating by the server of the PXE client by the received PXE client certificate of authenticity; and

transferring the boot files from the server to the authenticated PXE client.

Claim 24 (currently amended): The method of claim 23 wherein PXE clients that have an invalid or revoked certificate are not authenticated or answered by the server.

Claim 25 (currently amended): The method of claim 23 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 26 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the to the PXE client;

sending by the-server via the network a server certificate of authenticity to the PXE client;

authenticating by the PXE client of the server by the received server certificate of authenticity;

requesting by the PXE client using the PXE code via the network that the authenticated server transfer the boot files to the PXE client; and

transferring the boot files from the authenticated server to the PXE client in response to the requesting by the PXE client wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 27 (currently amended): The method of claim 26 wherein servers that have an invalid or revoked certificate are not acknowledged by the PXE client.

Claim 28 (currently amended): The method of claim 26 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 29 (currently amended): The method of claim 28 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 30 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

receiving by the server a request from the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the to the PXE client;

receiving by the server via the network a previously installed PXE client certificate of authenticity from the PXE client;

authenticating by the server of the PXE client by the received PXE client certificate of authenticity; and

sending the boot files to the authenticated PXE client by the server via the network wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 31 (currently amended): The method of claim 30 wherein servers that have an invalid or revoked certificate are not acknowledged by the PXE client.

Claim 32 (currently amended): The method of claim 30 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 33 (currently amended): The method of claim 32 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 34 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

receiving by the PXE client using the PXE code via the network a server certificate of authenticity from the server;

authenticating by the PXE client of the server by the received server certificate of authenticity;

requesting by the PXE client using the PXE code via the network that the authenticated server transfer the boot files to the PXE client; and

receiving the boot files from the authenticated server to the PXE client in response to the requesting by the PXE client wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 35 (currently amended): The method of claim 34 wherein servers that have an invalid or revoked certificate are not acknowledged by the PXE client.

Claim 36 (currently amended): The method of claim 34 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 37 (currently amended): The method of claim 34 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 38 (currently amended): A method of transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising:

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

transferring the boot files from the server to the PXE client in response to the requesting by the PXE client;
authenticating by the PXE client of the transferred boot files; and
executing by the authenticated PXE client of the authenticated boot files thereby creating, recreating, modifying, expanding or enhancing an operating system for the PXE client.

Claim 39 (currently amended): The method of claim 38 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 40 (currently amended): The method of claim 39 wherein boot files received by the PXE client that are incorrectly signed are not executed by the PXE client.

Claim 41 (currently amended): A system for transferring boot files, comprising:
a PXE client including PXE code;
a server having boot files, said server receiving a request from the PXE client using the PXE code that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the PXE client;
software authenticating the PXE client to the server;
software authenticating the server to the PXE client; and
software transferring the boot files from the authenticated server to the authenticated PXE client in response to the received request wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 42 (currently amended): The system of claim 41 further comprising software authenticating the transferred boot files to the authenticated PXE client.

Claim 43 (currently amended): The method of claim 42 wherein the authenticated PXE client includes an operating system generated from the executed authenticated boot files.

Claim 44 (currently amended): The system of claim-41 wherein the transferred boot files include a signature and wherein the PXE client verifies the signature.

Claim 45 (currently amended): A computer readable medium storage for transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising instructions for:

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

sending by the PXE client using the PXE code via the network a previously installed PXE client certificate of authenticity; and

receiving by the PXE client of the boot files from the server wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 46 (currently amended): A computer readable storage medium for transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising instructions for:

receiving by the server a request from the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

receiving by the server via the network a previously installed PXE client certificate of authenticity from the PXE client;

authenticating by the server of the PXE client by the received PXE client certificate of authenticity; and

transferring the boot files from the server to the authenticated PXE client wherein the authenticated PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 47 (currently amended): A computer readable storage medium for transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising instructions for:

receiving by the server a request from the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

receiving by the server via the network a previously installed PXE client certificate of authenticity from the PXE client;

authenticating by the server of the PXE client by the received PXE client certificate of authenticity; and

sending the boot files to the authenticated PXE client by the server via the network wherein the authenticated PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 48 (currently amended): A computer readable storage medium for transferring via a network boot files from a server to a PXE client having a pre-OS environment including PXE code, comprising instructions for:

requesting by the PXE client using the PXE code via the network that the server transfer the boot files for execution by the PXE client to at least one of create, recreate, modify, expand and enhance an operating system for the ~~to the~~ PXE client;

receiving by the PXE client using the PXE code via the network a server certificate of authenticity from the server;

authenticating by the PXE client of the server by the received server certificate of authenticity;

requesting by the PXE client using the PXE code via the network that the authenticated server transfer the boot files to the PXE client; and

receiving the boot files from the authenticated server to the PXE client in response to the requesting by the PXE client wherein the PXE client executes the boot files thereby creating, recreating, modifying, expanding or enhancing an operating system of the PXE client.

Claim 49 (new): The method of claim 1 wherein the PXE code of the PXE client comprises: The Dynamic Host Configuration Protocol (DHCP) for allowing the PXE client to receive an IP address to gain access to the server via the network; a set of application program interfaces (API) for automating the booting of the operating system and other configuration steps on the PXE client; and a standard method of initializing the PXE code in the PXE ROM chip or boot disk of the PXE client.